

APHIS – Plant Protection and Quarantine
California Department of Food and Agriculture
Daily Situation Report: Light Brown Apple Moth (LBAM)
June 1, 2007

Survey and Diagnostics Information:

| Counties | Survey | | Diagnostics | |
|-----------------|-----------------|----------------------|--------------------|-------|
| | Number of Traps | Presumptive Positive | Confirmed Positive | |
| | | | Today | Total |
| Alameda | 1,278 | 0 | 0 | 143 |
| Amador | 33 | 0 | 0 | 0 |
| Butte | 164 | 0 | 0 | 0 |
| Calaveras | 20 | 0 | 0 | 0 |
| Colusa | 27 | 0 | 0 | 0 |
| Contra Costa | 1,374 | 0 | 2 | 72 |
| Del Norte | 107 | 0 | 0 | 0 |
| El Dorado | 77 | 0 | 0 | 0 |
| Fresno | 778 | 0 | 0 | 0 |
| Humboldt | 74 | 0 | 0 | 0 |
| Imperial | 225 | 0 | 0 | 0 |
| Kern | 554 | 0 | 0 | 0 |
| Kings | 133 | 0 | 0 | 0 |
| Lake | 58 | 0 | 0 | 0 |
| Los Angeles | 5,233 | 0 | 0 | 0 |
| Madera | 191 | 0 | 0 | 0 |
| Marin | 177 | 0 | 0 | 11 |
| Mendocino | 28 | 0 | 0 | 0 |
| Merced | 294 | 0 | 0 | 0 |
| Monterey | 1,794 | 0 | 0 | 243 |
| Napa | 657 | 0 | 0 | 1 |
| Orange | 1,556 | 0 | 0 | 0 |
| Placer | 73 | 0 | 0 | 0 |
| Riverside | 1,128 | 0 | 0 | 0 |
| Sacramento | 1,411 | 0 | 0 | 0 |
| San Benito | 73 | 0 | 0 | 0 |
| San Bernardino | 698 | 0 | 0 | 0 |
| San Diego | 1,536 | 0 | 0 | 0 |
| San Francisco | 151 | 0 | 0 | 55 |
| San Joaquin | 480 | 0 | 0 | 0 |
| San Luis Obispo | 277 | 0 | 0 | 0 |
| San Mateo | 1,000 | 0 | 0 | 11 |
| Santa Barbara | 482 | 0 | 0 | 0 |
| Santa Clara | 1,918 | 0 | 0 | 5 |
| Santa Cruz | 713 | 0 | 0 | 3,070 |
| Shasta | 197 | 0 | 0 | 0 |
| Solano | 231 | 0 | 0 | 0 |
| Sonoma | 273 | 0 | 0 | 0 |
| Stanislaus | 259 | 0 | 0 | 0 |
| Sutter | 110 | 0 | 0 | 0 |
| Tehama | 60 | 0 | 0 | 0 |
| Trinity | 79 | 0 | 0 | 0 |

| | | | | |
|----------|--------|---|---|-------|
| Tulare | 577 | 0 | 0 | 0 |
| Tuolumne | 48 | 0 | 0 | 0 |
| Ventura | 539 | 0 | 0 | 0 |
| Yolo | 168 | 0 | 0 | 0 |
| Yuba | 50 | 0 | 0 | 0 |
| Total | 27,363 | 0 | 2 | 3,611 |

- **Survey**

- Survey teams continue to implement a rigorous detection and delimiting survey for the light brown apple moth (LBAM), *Epiphyas postvittana*, in 47 counties.
- A total of 27,363 pheromone-baited traps have been deployed to date. Traps are placed in and around retail and production nurseries, at ports of entry, and in the open environment and are being inspected bi-weekly.
- Visual inspections of all nurseries located within 1.5 miles from any traps with confirmed LBAM are conducted for the presence of any life stages.

- **Identification and Diagnostics**

- Trapped moths are forwarded to the California Department of Agriculture's (CDFA) Plant Pest Diagnostics Laboratory for the initial identification. All LBAM "presumptive positive" moths from each county are forwarded to the ARS Systematic Entomology Laboratory (SEL) in Washington, DC, for confirmation. In counties where previous specimens have been confirmed by SEL, subsequent captures are identified by CDFA.
- A total of 3,611 moths have been confirmed to date as LBAM. Most of the captures (99%), however, are from traps located in two specific geographical areas. The first area, representing 92% of all LBAM captures, encompasses southern Santa Cruz and northern Monterey counties. The second area, which represents approximately 7% of captures, includes the contiguous northwest Alameda, western Contra Costa, and northern San Francisco counties. The remaining 1% came from mostly single trap captures in Marin, Napa, San Mateo, and Santa Clara counties.
- LBAM immature life stages, including larvae and pupae have been found in a total of fourteen (18) nurseries, cut flower or greenery farms in Marin, Monterey, San Francisco, San Mateo, Santa Clara, and Santa Cruz counties. All of which have been treated and re-inspected as part of the regulatory requirements.

Operational Update:

- **Technical Working Group (TWG)**

- APHIS has assembled a team of subject matter experts from the United States, Australia, and New Zealand to provide recommendations on survey methods, mitigation tools, and eradication strategies. The TWG toured the infested region on May 16 and completed its two-day meeting on May 17-18 in San Jose, California. The TWG forwarded a draft of the recommendations

designed to provide short and long-term plans to contain, control, and eradicate LBAM in California. The recommendations are currently being finalized.

- **Incident Command**
 - A total of 112 personnel are on-site (82-CDFA/Counties; 30-APHIS) assuming various roles within the ICS structure.
- **Regulatory Actions**
 - CDFA, APHIS, and County personnel continue to conduct inspections and certification of host commodities in the quarantine areas as required by State LBAM regulations and by the Federal Quarantine Order.
 - To date, a total of 237 compliance agreements have been issued to establishments located within the quarantine area requiring regular inspections of all nursery stock and report to regulatory officers any suspect LBAM.
- **Trace-back and Trace-forward**
 - Trace-back and trace-forward investigations to determine the source and potential distribution of LBAM continue, including the inspection of nursery establishments.
- **Treatment**
 - Nurseries with host plants that are confirmed as infested with LBAM larvae or pupae are being treated with Chlorpyrifos.
 - EPA has issued a “Section 18” exemption for ISOMATE, one of the pheromone formulations used for mating disruption and eradication.
 - CDFA and APHIS began to develop operational plans designed to contain, control, and eradicate LBAM in California as recommended by the TWG.

Trade Update:

- APHIS informed trading partners of the LBAM finds in California. Additional reports were provided to Canada and Mexico in response to their requests for additional information.
- A team from Canada visited California on May 9-11 to view the LBAM response activities. A team from Mexico also toured the area on May 23.
- Mexico has, on May 24, suspended importation of certain LBAM host crops commodities – primarily fruits and nursery stock – from the quarantined counties in California and Hawaii and has required additional inspection and certification of commodities originating from outside quarantined counties.

Communication and Outreach:

- Public Information Officers (PIO) and officials from CDFA, APHIS, and Counties continue to field questions from the press and the public regarding the LBAM finds and the regulatory framework.
- Public open house events are scheduled for June 11 in Oakley and June 12 in Napa to inform the communities of LBAM program activities.

Background:

- On February 6, 2007, a private citizen near Berkeley in Alameda County, California, reported that two suspect moths had been captured in a blacklight trap on his property.
- In response, pheromone-baited traps were placed on March 1, 2007, in Alameda and Contra Costa counties. Trap inspections began March 7, 2007.
- On March 16, 2007, the ARS Systematic Entomology Laboratory (SEL) in Washington, DC, confirmed through morphological testing that the two samples submitted were, in fact, LBAM.
- USDA and CDFA issued press releases on March 22, 2007, announcing the confirmation of LBAM in California. APHIS. Also, APHIS issued a SPRO letter informing States and stakeholders of the LBAM in California.
- CDFA established on April 20, 2007 a LBAM quarantine of at least 182 square miles in Alameda, Contra Costa, San Francisco, Marin and Santa Clara counties. The quarantine is expected to expand to include Monterey, Santa Cruz and San Mateo counties.
- APHIS issued a LBAM Federal Quarantine Order on May 2, 2007, requiring inspection and certification of all nursery stock and host commodities from eight counties in California, including Alameda, Contra Costa, Marin, Monterey, San Francisco, San Mateo, Santa Clara, and Santa Cruz counties.
- The light brown apple moth (LBAM), *Epiphyas postvittana*, is a native pest of Australia and is now widely distributed New Zealand, the United Kingdom, Ireland, and New Caledonia. Although it was reported in Hawaii in the late 1800s, the LBAM find in California is the first on the US mainland.
- LBAM has a host range in excess of 120 plant genera in over 50 families, including nursery stock, cut flowers, stone fruit (peaches, plums, nectarines, cherries, and apricots), pome fruit (apples and pears), grapes, and citrus.
- Left uncontrolled, LBAM could cause an estimated \$133 million in crop damage and control costs if it spreads to agricultural production areas in California.